

REMARKS

The Examiner has objected to claims 1-5 under 35 U.S.C. 112, first paragraph for failing to comply with the enablement requirement. Applicant respectfully submits that the amended claims meet the enablement requirement. The invention as now claimed, involves the use of red cabbage extract as a pH indicator. Applicant submits that the invention lies in the Applicant's determination of the concentration of red cabbage extract that is required in a concentrate for preparing an agricultural compound in order to give a meaningful visual color change showing that pH of the concentrate is in the desired range of pH 4-6 upon dilution with a local water source. As shown in the references cited by the Examiner, it was previously known that red cabbage extract could be used as a pH indicator. As discussed below, it is the Applicant's determination of the required concentration of red cabbage extract that is required in the concentrate that is inventive. Applicant therefore submits that the preparation of red cabbage extract as a pH indicator was well within the common general knowledge of a person skilled in the art on the relevant date of the present application. Accordingly the requirements 35 U.S.C. 112, first paragraph are met by the present disclosure.

The Examiner has objected to claims 1-5 under 35 U.S.C. 112, second paragraph for being indefinite. The Examiner states that it is unclear what "a concentration of about 10 to about 25%" means within the concentrate. Applicant has accordingly amended the claims to recite "a concentration of about 10 to about 27.5% by weight of the concentrate". Support for this amendment may be found at page 4, lines 19-31 of the disclosure where it is stated that the percentages are in terms of mass. In addition, the upper limit for the concentration of the cabbage extract is shown as being as high as 27.5%. It is therefore submitted that the Examiner's objection under 35 U.S.C. 112, second paragraph has been met by this amendment.

The Examiner has objected to claims 1-5 as being anticipated by Lopes Terci. In addition, the Examiner has objected to claim 1 as being anticipated by Freadman and Azar.

The Examiner additionally objects to claims 1-5 as being obvious having regard to Fisher in view of Freadman and Lopes Terci.

The invention as now claimed, is a concentrate comprising a mixture of a pH modifying agent and a naturally occurring pH indicator for coloring water, said naturally occurring pH indicator consisting of an extract of red cabbage, which concentrate can be diluted with water and added to an agricultural chemical for application to crops, soil or animals, the agricultural chemical having an activity that varies with the pH of the water and having an acceptable agricultural activity at a pH within the range of 4-6, wherein the proportions of pH modifying agent and pH indicator in the concentrate are such that when the concentrate is diluted with water and the pH of the water is modified by the pH modifying agent, the pH indicator indicates visually when the pH of the water is in the range of from about 4 to about 6, wherein said pH indicator is present in a concentration of about 10 to about 27.5% by weight of the concentrate. A method of making this concentrate is now also claimed.

Lopes Terci teaches that grape fruit extract or grape skin extract can be used as a pH indicator.

Freadman teaches that red cabbage and grape can be used as a pH indicator.

Azar discloses pH indicators extracted from lichens or cabbage.

As mentioned above, Applicant submits that the invention claimed in the amended claims lies not in the discovery that red cabbage extract can be used as a pH indicator, Applicant admits that this was known on the relevant date for this application. In practice however, the skilled artisan also knows that it is very difficult to effectively use red cabbage extract as a pH indicator due to the very faint color change of the red cabbage extract required to show a deviation from the required pH range of 4 to 6. As result, the color change was previously so difficult to detect that for practical purposes the skilled artisan was unable to use red cabbage as a pH indicator for the purposes of the present invention. Through much time and labor, Applicant has been able to determine that very large volumes of red cabbage extract are required in order to obtain a visually detectable color change that shows a deviation of from the required pH range of 4 to 6. Applicant has discovered that a visually detectable color change can be achieved where the red cabbage extract is present in a concentration of about 10 to about 27.5% by weight of the concentrate.

Applicant respectfully submits that cited references neither alone nor in combination teach nor suggest the amount of red cabbage extract that is required to achieve an effective visually detectable color change. It is therefore respectfully submitted that the amended claims patentably distinguish over the cited references.

Favourable reconsideration and allowance of this application are respectfully requested.

A Petition for an Extension of Time requesting an extension of one months for filing the subject response is enclosed. The Commissioner is authorized to charge any deficiency or credit any overpayment in the fees for same to our Deposit Account No. 500663.

Executed at Toronto, Ontario, Canada, on April 17, 2009.

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